

P20670.A03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :K. WANNER et al.

Serial No. : 09/763,617

Filed :September 3, 1999

For :GABA UPTAKE INHIBITORS HAVING A PYRROLIDINE STRUCTURE



PTO/PCT Rec'd 04 JUN 2001

INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. 1.56 and 37 C.F.R. 1.97-1.98, Applicants hereby direct the Examiner's attention to the following documents cited in the International Search Report drawn up for International Application No. PCT/EP 99/06486 of which the above-identified application is the National Stage application:

- (a) WO 97/45115 A (TROPHIX PHARM. INC.), 4 December 1997;
- (b) GB 2 145 081 A (THE WELLCOME FOUNDATION LTD.), 20 March 1985;
- (c) WO 87/00171 A (NOVO INDUSTRI AS), 15 January 1987. For the Examiner's convenience Applicants submit herewith U.S. Patent No. 5,010,090 which is a family member of document (c);
- (d) EP 0 346 927 A (WARNER LAMBERT CO.), 20 December 1989. For the Examiner's

convenience Applicants submit herewith U.S. Patent Nos. 5,053,521 and 5,116,988 which are family members of document (d);

(e) U.S. Patent No. 4,514,414 (BONDINELL et al.), 30 April 1985; and

(f) U.S. Patent No. 4,383,999 (BONDINELL et al.), 17 May 1983.

Applicants also direct the attention of the Examiner to the following documents cited in addition to the above documents (a) and (e) in the Search Report issued by the German Patent and Trademark Office in connection with German Patent Application No.198 40 611, which is a family member of the present application:

(g) U.S. Patent No. 4,610,995 (COKER et al.), 9 September 1986

(h) EP 0 236 342 B (NOVO NORDISK A/S), 11 September 1991. This document is a family member of document (c) and U.S. Patent No. 5,010,090 cited above;

(i) EP 0 231 996 A (NOVO Industri A/S), 12 August 1987. For the Examiner's convenience Applicants submit herewith U.S. Patent No. 4,931,450 which is a family member of document (i);

(j) EP 0 374 801 A (NOVO NORDISK A/S.), 27 June 1990. For the Examiner's convenience Applicants submit herewith U.S. Patent No. 5,071,859 which is a family member of document (j);

(k) PAVIA, Michael R., et al.: Structure-Activity Studies on Benzhydrol-Containing Nipecotic Acid and Guvacine Derivatives as Potent, Orally-Active Inhibitors of GABA Uptake. In: J. Med. Chem. 1992, 35, pp. 4238-4248;

(l) ANDERSEN, Knud Erik, et al.: The Synthesis of Novel GABA Uptake Inhibitors. 1. Elucidation of the Structure-Activity Studies Leading to the Choice of (R)-1-[4,4-Bis(3-methyl-2-thienyl)-3-butenyl]-3-piperidinocarboxylic Acid (Tiagabine) as an Anticonvulsant Drug Candidate. In: J. Med. Chem. 1993, 36, pp. 1716-1725.

Regarding the enclosed Search Report from the German Patent and Trademark Office, the passages explaining the cited documents read as follows:

| <u>Category</u> | <u>Revealed Documents/Explanations</u> | <u>Relates to Claim</u> |
|-----------------|--|-------------------------|
| X,Y | see documents in Annex 1 | 1-15 |
| X | WO 97 45 115 A1/ in particular compounds B6 and B12, p. 39 | 1-14 |
| X | US 46 10 995/claims and Example 1 | 1-14 |

Due to the various and indefinite substituent meanings, a complete search (and, in particular, one clarifying the novelty of all compounds falling within formula 1 of claim 1) could not be carried out. Therefore, the search was limited to the range supported by specific examples.

X: Documents which on their own cast doubt on novelty or inventive step.

Y: Documents which in combination with other documents cast doubt on inventive step

Applicants further direct the Examiner's attention to the following documents:

(m) Suzak, Peter D.: Lipophilic GABA uptake inhibitors: Biochemistry, pharmacology and therapeutic potential. In: Drugs of the Future 1993, 18(12), pp.1129-1136;

(n) Murali Dhar, T.G., et al.: Design, Synthesis and Evaluation of Substituted Triarylnipecotic Acid Derivatives as GABA Uptake Inhibitors: Identification of a Ligand with Moderate Affinity and Selectivity for the Cloned Human GABA Transporter GAT-3. In: J. Med. Chem. 1994, 37, pp. 2334-2342.

(o) Thomsen, C., et al.: 1-(3-(9H-Carbazol-9-yl)-1-propyl)-4-(2-methoxyphenyl)-4-piperidinol, a novel subtype selective inhibitor of the mouse type II GABA-transporter. In: British Journal of Pharmacology (1997) 120, 983-985.

Copies of the above-listed documents (including the International Search Report and the Search Report from the German Patent and Trademark Office, as well as a copy of the English translation of the International Preliminary Examination Report for International Application No. PCT/EP 99/06486) are enclosed together with a completed copy of the PTO-1449 Form listing these documents. Accordingly, the Examiner is requested to consider these documents and to indicate such consideration by returning a signed and initialed copy of the PTO-1449 Form with the first official communication.

Inasmuch as the present National Stage application was filed March 02, 2001 the current Information Disclosure Statement is filed within three months (June 2, 2001 falling on a Saturday) and no fee should be necessary for consideration of this submission.

Should there be any questions or comments, the Examiner is invited to contact the undersigned at the below- listed telephone number.

Respectfully submitted,
K. WANNER et al.


Neil F. Greenblum Reg. No. 28,394

Reg. No. 28,394
31,296

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GREENBLUM & BERNSTEIN, P.L.C.
1941 Roland Clarke Place
Reston, VA 20191
(703) 716-1191